

I. AMENDMENT

In the Claims:

Please amend the claims by replacing them with the following listing of claims, which will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method of removing a nucleic acid probe from a sample nucleic acid comprising:
 - a) obtaining a sample nucleic acid ~~associated with~~ hybridized to a nucleic acid probe;
 - b) breaking at least a first bond of the nucleic acid probe with iodine, hydroxyl ion, an enzyme, a particular wave length of light, or temperature; and
 - c) removing the nucleic acid probe from said sample nucleic acid.
2. (Original) The method of claim 1, wherein said nucleic acid probe comprises DNA.
3. (Original) The method of claim 1, wherein said nucleic acid probe comprises RNA.
4. (Original) The method of claim 1, wherein said nucleic acid probe comprises at least a first uracil residue.
5. (Original) The method of claim 1, wherein said first bond is a phosphodiester bond.
6. (Original) The method of claim 1, wherein said first bond is a phosphorothioate bond.
7. (Original) The method of claim 6, wherein said first bond is broken by iodine.
8. (Original) The method of claim 7, wherein the concentration of said iodine is between about 0.1 mM and about 25 mM.
9. (Withdrawn) The method of claim 1, wherein said first bond is broken by a hydroxyl ion.
10. (Withdrawn) The method of claim 9, wherein the concentration of said hydroxyl ion is between about 10^{-1} M and about 10^{-5} M.

11. (Original) The method of claim 1, wherein said first bond is broken by an enzyme.
12. (Original) The method of claim 11, wherein said first bond is broken by uracil DNA glycosylase.
13. (Original) The method of claim 11, wherein said first bond is broken by a ribonuclease.
14. (Original) The method of claim 13, wherein said first bond is broken by inosine ribonuclease.
15. (Original) The method of claim 11, wherein said first bond is broken by a deoxyribonuclease.
16. (Withdrawn) The method of claim 1, wherein said first bond is broken by light.
17. (Withdrawn) The method of claim 1, wherein said first bond is broken by temperature.
18. (Original) The method of claim 1, wherein said sample nucleic acid comprises DNA.
19. (Original) The method of claim 1, wherein said sample nucleic acid comprises RNA.
20. (Currently Amended) The method of claim 1, ~~comprising attaching~~ wherein said sample nucleic acid hybridized to said nucleic acid probe is attached to a solid support.
21. (Original) The method of claim 20, wherein said solid support is a membrane.
22. (Original) The method of claim 21, wherein said membrane is a nitrocellulose membrane or a nylon membrane.
23. (Original) The method of claim 20, wherein said solid support is a resin.
24. (Original) The method of claim 23, wherein said resin is an ion exchange chromatography resin or an affinity chromatography resin.
25. (Original) The method of claim 30, wherein said solid support is plastic.
26. (Original) The method of claim 20, wherein said solid support is a magnetic bead.

27. (Original) The method of claim 20, wherein said solid support is glass.
28. (Original) The method of claim 20, wherein said solid support is a microchip.
29. (Original) The method of claim 20, comprising separating said sample nucleic acid by electrophoresis prior to attachment to said solid support.
30. (Original) The method of claim 29, comprising cleaving said sample nucleic acid by an enzyme prior to separation by electrophoresis.
31. (Currently Amended) The method of claim 1, wherein obtaining a sample nucleic acid hybridized to ~~asseeiated with~~ a nucleic acid probe comprises:
- a) obtaining a sample nucleic acid;
 - b) obtaining a nucleic acid probe; and
 - c) admixing said nucleic acid probe with said sample nucleic acid to allow ~~asseeiation of~~ hybridization of said nucleic acid probe with said sample nucleic acid.
32. (Original) The method of claim 31 comprising attaching the sample nucleic acid to a solid support prior to admixing the nucleic acid probe with the sample nucleic acid.
33. (Currently Amended) A method of stripping a nucleic acid probe from a sample nucleic acid, said sample nucleic acid attached to a solid support, comprising:
- a) obtaining a solid support with a sample nucleic acid attached thereto;
 - b) obtaining a nucleic acid probe, said nucleic acid probe comprising at least a first bond;
 - c) admixing said nucleic acid probe with said solid support to allow ~~asseeiation of~~ hybridization of said nucleic acid probe with said sample nucleic acid;
 - d) cleaving said first bond of said nucleic acid probe with iodine, a hydroxyl ion, an enzyme, a particular wavelength of light, or temperature; and
 - e) removing said nucleic acid probe from said sample nucleic acid.

34-47. (Canceled)